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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/940,716 | 08/29/2001 | Isao Muraguchi | N36-136495 M/TH | 5755 |

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WHITHAM, CURTIS & CHRISTOFFERSON, P.C.
11491 SUNSET HILLS ROAD
SUITE 340
RESTON, VA 20190

EXAMINER

SHAHER, RICKY D

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 11/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/940,716

Applicant(s)

MURAGUCHI ET AL.

Examiner

Ricky D. Shafer

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6 and 9-14 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6 and 9 is/are rejected.
- 7) ☒ Claim(s) 10,11,13 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/06/2004
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's election of invention I (claims 1 and 3-6) and species "B", the outermost layer having an index of refraction of 1.62, in the reply filed on August 13, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 12 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on August 13, 2004.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, 4 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawaguchi et al ('345).

Kawaguchi et al discloses an optical filter comprising a plurality of dielectric materials alternatively arranged on a transparent substrate (1) to form a laminate, wherein said filter includes a first dielectric group (SiO₂) having a low index of refraction, a second dielectric group (TiO₂) having a high index of refraction and a third dielectric layer (SnO₂) having an intermediate index of refraction, serving as the outermost surface of the filter. Note figures 1 to 3 along with the associated description thereof.

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5. Claims 1, 3, 4 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by French Patent ('624).

French Patent ('624) discloses an optical filter comprising a plurality of dielectric materials alternatively arranged on a transparent substrate (7) to form a laminate, wherein said filter includes a first dielectric group (2,4) of SiO₂ having a low index of refraction, a second dielectric group (1,3) of TiO₂ having a high index of refraction and a third dielectric layer (6) having an intermediate index of refraction, serving as the outermost surface of the filter. Note figure 1 along with the associated description thereof.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawaguchi et al ('345) or French Patent ('624) in view of Kobayashi et al ('059).

Kawaguchi et al ('345) and French Patent ('624) discloses all of the subject matter claimed, note the above explanation, except for explicitly that the filter is orientated at an angle of incidence between 20 to 70 degrees and that the layers of the filter approximate a quarter wavelength.

Kobayashi et al teaches it is well known to orientate an optical filter at an angle of incidence between 20 to 70 degrees and that the layers of the filter approximate a quarter wavelength in the same field of endeavor for the purpose of regulating/controlling the reflection and transmission characteristics of the filter.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the orientation of the optical filter of Kawaguchi et al ('345) or French Patent ('624) at an angle of incidence between 20 to 70 degrees and select the layers of the filter to approximate a quarter wavelength, as taught by Kobayashi et al, in order to regulate/control the reflection and transmission characteristics of the filter.

8. Claims 10, 11, 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 10, 13 and 14 are objected to because of the following informalities:

In claim 10, line 3, the language "or 1.46" should be deleted.

In claims 13 and 14, line 6, the language "the outermost layer" should be changed to read --said layer on an outermost surface--.

In claim 14, line 5, the language "first" should be deleted.

Appropriate correction is required.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricky D. Shafer whose telephone number is (571) 272-2320.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about

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the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RDS

November 01, 2004

Randy S. Self
Randy S. Self
2872